

# Missouri Department of Natural Resources



## PUBLIC NOTICE

### DRAFT MISSOURI STATE OPERATING PERMIT

DATE: August 13, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, Professional Engineer. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curd v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by September 13, 2004 or received in our office by 5:00 p.m. on September 16, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.state.mo.us/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: August 13, 2004

Permit Number: MO-R409000

General Permit

FACILITY NAME AND ADDRESS

Various throughout the state.

NAME AND ADDRESS OF OWNER

Various throughout the state.

RECEIVING STREAM & LEGAL DESCRIPTION

Various throughout the state.

TYPE OF DISCHARGE

Industrial, In Place Soil Remediation  
Systems

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI TYPE II OPERATING PERMIT

GENERAL PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 86th Congress) as amended,

MO-R409000

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

**FACILITY DESCRIPTION**

Shallow Injection

All Outfalls - In place soil remediation or bioremediation of petroleum contaminated soil and subsoil around storage tanks through injection of materials into strata, which are not aquifers. The limits on page 2 of 4 apply to any water withdrawn from the site and discharged to the waters of the state.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

\_\_\_\_\_  
Effective Date

\_\_\_\_\_  
Stephen M. Mahfood, Director, Department of Natural Resources  
Executive Secretary, Clean Water Commission

\_\_\_\_\_  
Expiration Date  
MO 780-0041 (10-93)

\_\_\_\_\_  
Jim Hull, Director of Staff, Clean Water Commission

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>				PAGE NUMBER 2 of 5		
				PERMIT NUMBER MO-R409000		
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>All Outfalls</u> (Note 1)						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Benzene	mg/L	0.05		0.05	once/quarter**	grab
Toluene	mg/L	*		*	once/quarter**	grab
Ethylbenzene	mg/L	*		*	once/quarter**	grab
Xylene	mg/L	*		*	once/quarter**	grab
Total BETX***	mg/L	0.75		0.75	once/quarter**	grab
Oil and Grease	mg/L	15		10	once/quarter**	grab
Total Petroleum Hydrocarbons (TPH)	mg/L	10		10	once/quarter**	grab
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	80		60	once/quarter**	grab
pH - Units	SU	****		****	once/quarter**	grab
Methyl Tertiary Butyl Ether (MTBE) (Note 2)	mg/L	0.020		0.020	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per quarter as soon as a discharge occurs.
- \*\*\* Total BETX shall be measured as the sum of Benzene, Ethylbenzene, Toluene, and xylene.
- \*\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 - The water tested will be the final water disposed.

Note 2 - Use EPA method 8260A, not 8020/A/21B due to detection limit concerns.

APPLICABILITY

1. This permit allows the placement of remediation materials or chemicals, both inorganic and organic, as well as bacterial agents into the ground in order to enhance or speed the in situ remediation of petroleum contaminated soil and subsoil. This permit is to be used only for petroleum contaminated soils and subsoils. Other contaminants are not covered by this permit and applicant must apply for a site-specific permit. Soils contaminated to such an extent that they are considered hazardous in accordance with 40 CFR 261.24 are ineligible for this permit.

2. This permit does not authorize injection of any substance, or allow the injected substances to reach an aquifer.

An aquifer is a subsurface layer consisting of sand, gravel or bedrock which stores or transmits water in large quantities that is presently being utilized or could be utilized as a water source for private or public use. (10 CSR 20-2.010(7)). This water does not have to have any (potable) characteristics. Aquifer does not include "perched water" located above a claypan, hardpan, or other relatively impermeable soil layer that is underlaid by another unsaturated soil zone, or the vadose zone.

3. Potential applicants for this general permit are warned that any test hole or boring deeper than 10 feet may require a permit from the Division of Geology and Land Survey.
4. Facilities that are located within the watershed of the 303(d) listing of impaired waters will need to be evaluated, on a case-by-case basis, for inclusion under this general permit. Facilities that are found to be discharging the listed pollutant(s) of concern may be required to obtain a site-specific permit.
5. If at any time the permit holder should desire to apply for a site-specific State Operating permit, the owner may do so.
6. If at any time the Missouri Department of Natural Resources determines that the quality of the waters of the state are not being adequately protected, this permit will be revoked, the remediation system shall be dismantled and all contaminated soils shall be removed and disposed of in a manner accepted by the Missouri Department of Natural Resources.
7. This permit **does not apply** to discharges:
  - (a) Within 1,000 feet of streams identified as a losing stream\*,
  - (b) Within 1,000 feet of streams or lakes listed as an outstanding national or state resource water\*,
  - (c) Within 1,000 feet of reservoirs or lakes used for public drinking water supplies (class L1)\*,
  - (d) Within 1,000 feet of streams, lakes, or reservoirs identified as critical for endangered species,
  - (e) Within 500 feet of intermittent streams or wetlands\*,
  - (f) Within 100 feet of a permanent stream (class P)\* or major reservoir (class L2)\*,
  - (g) Within two stream miles upstream of biocriteria reference locations\*, or
  - (h) Where discharge is to a sinkhole or other direct conduit to groundwater.

The stream or lake classifications denoted by \* are identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and may be purchased from MDNR by contacting the Water Protection Program.

8. Facilities that discharge directly to a combined sewer system are exempt from permit requirements.

CONSTRUCTION PERMIT EXEMPTION

1. The permittee is exempted from obtaining a construction permit when the requirements of this permit are met.

APPLICATION REQUIREMENTS

1. A geological report, signed by a professional geologist or geological engineer, must accompany the application stating that injection is not into an aquifer and that the injected fluids will not reach an aquifer. This statement must be notarized or stamped with the seal of the geologist or geological engineer.
2. A site map and description of the treatment system must accompany the application.

OPERATION REQUIREMENTS

1. Fluids and chemicals that were injected into the subsurface must be removed to background or pre-injection levels. This must be done using a final pumping or placing the chemicals in a "work" which will be removed at the end of the project.
2. The treatment system must not be located within the 10-year floodplain of a classified stream.
3. The treatment system, including collection and recirculation piping, shall not be located within 25 vertical feet of an aquifer.
4. Collection or recirculation piping shall be removed when remediation is complete except for any monitoring well installations.
5. The treatment shall reduce the contamination levels to those acceptable by the Department and a final pumping and discharge meets the effluent limit and pumping records indicate that all fluids that are injected or allowed to infiltrate have been substantially removed.
6. Water Quality Standards
  - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
  - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
    - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
    - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
    - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
    - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
    - (5) There shall be no significant human health hazard from incidental contact with the water;

6. Water Quality Standards (cont.)

- (6) There shall be no acute toxicity to livestock or wildlife watering;
- (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except a use of such materials is specifically permitted pursuant to section 260.247.

SAMPLING

Analysis of the injected fluids is not required. This permit requires quarterly sampling of all fluids extracted and discharged at the well to protect.

PERMIT TRANSFER

This permit may be transferred to a new permittee by submitting an "Application for Transfer of Operating Permit" signed by the transferor and transferee of the facility, along with the appropriate modification fee.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date.

TERMINATION OF PERMIT

If activities covered by this permit have ceased and this permit no longer applies, the permittee shall request termination of this permit. The permittee shall submit Form H, Termination of a General Permit.

DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

RECORDS RETENTION AND REPORTING

All sampling data shall be maintained by the permittee for a period of five (5) years and shall be supplied to the Department of Natural Resources upon written request (supersedes Part I. Section A: 7. Records Retention). A copy of all of the sampling data must be submitted with an application for reissuance of this permit.

FACT SHEET  
General Permit  
In Place Soil Remediation Systems  
NPDES No. MO-R409000

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Department of Natural Resources under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended).

State programs have the authority to issued general permits to sources of discharge if the Director feels that the discharge is appropriately controlled by a general permit. Water discharged from in place soil washing systems is a point source, and consequently is subject to permit requirements. Because the discharges authorized by this permit covers facilities which involve the same or substantially similar types of operations; discharge the same types of wastes; require the same operating conditions or require the same monitoring; the Department has determined that under the requirements for General Permits, the discharges authorized by this permit are eligible for a general permit.

The proposed general permit is for discharges from in place soil washing systems located within the state of Missouri.

This permit allows the placement of remediation materials or chemicals, both inorganic and organic, as well as bacterial agents into the ground in order to enhance or speed the in situ remediation of petroleum contaminated soil and subsoil. This permit is to be used only for petroleum contaminated soils and subsoils. Other contaminants are not covered by this permit and applicants must apply for a site-specific permit. Soils contaminated to such an extent that they are considered hazardous in accordance with 40 CFR 261.24 are also ineligible for this permit.

This permit does not authorize injection into an aquifer, or allow the injected substances to reach an aquifer.

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